

COMMENT SHEET  
CVP COST ALLOCATION MEETING OF NOVEMBER 19, 2013

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Comments:

NCPA provides the following comments on the material presented at the November 19, 2013 meeting:

1. Historical Benefits. NCPA has provided previous comments to Reclamation on why the use of historical benefits is inappropriate for this cost allocation study. Reclamation has spent too much time trying to justify the use of historical benefits when it has been clearly demonstrated that historical benefits distort the cost allocation process and have socioeconomic impacts. Further comments on the shortcomings of the use of historical benefits are discussed in the paragraphs below.

In general, the purpose of undertaking a cost allocation update for a project that is considered to still be in "construction" status is to ensure that current accomplishments and costs are properly aligned. Proper alignment assures that during the remaining economic life of the project, project beneficiaries are assigned their appropriate share of the costs, independent of whether their project purpose is deemed reimbursable or non-reimbursable.

Historically the Mid-Pacific Region had a cost allocation policy that required completion of a major allocation of CVP costs every 10 years to ensure that the allocation is compatible with current use, accomplishments, benefits, and repayment responsibilities of the project. The policy was clear that benefits would be based on prospective basis, not those of the past. It recognized that project accomplishments changed over time and a continual update of the cost allocation is needed to align the allocated costs with the current accomplishments.

Reclamation stated at the meeting that historical benefits had always been used in previous CVP cost allocation evaluations. This is absolutely incorrect. The 1960 evaluation used future project benefits and costs to determine the present-worth values over a 100-year period of analysis and this is clearly stated in Reclamation's 2001 cost allocation report. The 1970 cost reallocation report

contains tables that show that the benefit period of analysis used future benefits only for the period from 1970 to 2069. The decision to use future benefits for the 1970 cost allocation was decided by Reclamation's senior economists at a meeting in Washington, D.C during the week of October 21, 1968. In 1975, a "short-form" reallocation of CVP costs was prepared that updated indexed costs and future benefits from the 1970 cost allocation. A February 13-14, 1975 meeting held in Washington D.C. confirmed that a future benefits analysis would yield the most accurate results. The 1988 cost allocation study states "Reclamation Instructions define the period of analysis as the shorter of either the remaining physical life or the economic life of the major project feature as of the time of the study. In either case, the period of analysis is not to exceed 100 years. In this 1988 cost allocation study, the period of analysis reflects the economic life of the major project features. This 100-year period begins with the first day of fiscal year 1987 and ends on the last day of fiscal year 2086." Again only future benefits were used in the 1988 allocation. Reclamation records show that in each CVP cost allocation since 1960 only future benefits were used in the analysis.

The importance of aligning project costs with current operations is shown in the Act of October 27, 1986. The Act amended the Central Valley Project Authorization Act to meet new water quality standards and directed Reclamation to undertake a new cost allocation study to account for the new requirements of the Act. Reclamation completed the cost allocation study in 1988 using a future benefits analysis over a 100-year period that began in fiscal year 1987. Using future benefits aligned the cost allocation to the new operational requirements as required by the Act.

Unfortunately this cost allocation was not implemented because the General Accounting Office reviewed the cost allocation process and found Reclamation included inappropriate costs and made questionable estimates of project benefits and alternative costs. As reported in the 1992 GAO report, the SCRB method is based on the principle that users should not pay more than the benefits they receive or more than the cost of the most economical single-purpose alternative that would achieve the same purpose. Therefore, to develop distribution percentages for allocating joint costs, the SCRB method relies on estimates of the benefits attributed to each purpose and estimates of the costs of alternatives to each purpose.

Future benefits are estimated to determine the limit of costs that can be allocated to the project purposes. For power, the benefits are based upon the projected value of power. If Reclamation used historical data that increased costs beyond the value of the future benefit, power users will choose another source of power that is more economical. Then Reclamation will only be able to receive market rates for power deliveries, which would be insufficient to recover Reclamation's costs. If historical data distorts the cost so that the future benefit is less than the value of energy that Reclamation is delivering, Reclamation will under collect

from power users. That is the strength of the SCRB allocation method - to determine the limits so costs are appropriately allocated for repayment based on how the project will be operated in the future. That is why the history of CVP cost allocations always used future benefits in the SCRB methodology.

Reclamation has presented different proposals on what it considers to be the period of analysis for the cost allocation study. The proposals have been very inconsistent on how historical benefits would be used. Initially the historical period to be used was 1980 forward. The proposal then changed to using historical benefits only if they did not exceed the single purpose alternative. Now it has been changed again to use historical benefits starting from the first year of CVP operation. Reclamation's inconsistent and constantly changing position on historical benefits occurs because there is no justifiable support to use historical benefits in the SCRB cost allocation. Reclamation seems more interested in managing the outcome of the SCRB allocation process than relying on the process to develop the correct result.

The use of historical benefits would cause the cost allocation to be unduly biased, as the cost allocation would accentuate benefits provided by the project during the early years of its operation while greatly devaluing operational changes that have occurred in the recent past. The present worth of benefits dramatically weighs the project benefits provided to the first few years of the analysis. At an interest rate of 3 ¼ percent half the benefit value for each project purpose would occur in the first 20 years of the present worth analysis. At an interest rate of 8 percent approximately 80 percent of the benefit valuation occurs in the first 20 years of the present worth analysis. Using Reclamation's latest historical benefit proposal future benefits starting in 2017 have approximately a 5 percent impact on the total benefit analysis at a 3 ¼ percent discount rate. If an 8 percent discount rate is used future benefits starting in 2017 have less than one-half of one percent impact on the total benefit analysis. Thus, if Reclamations' proposal to use historical benefits were used, the project benefits provided from 1945 to 1965 would significantly determine how the costs are to be allocated for rate setting from 2017 forward. The significant CVP operational changes that have recently occurred would barely make any difference in the cost allocation. One example is the navigation project purpose. If historical benefits are used, future costs will be allocated to a purpose that is no longer served by the CVP. This type of distortion would occur for every project purpose if historical data is used.

The purpose of the updated cost allocation is to align the project costs with the current and future benefits provided, not to make beneficiaries have costs allocated to them from project operations occurring more than 50 years ago. There is no question that the amount of water and generation provided by the CVP has continually declined in the last twenty five years. Weighting the cost allocation based on project operations that happened 50 years ago completely distorts the allocation of costs from future CVP water and power rate setting. For

a cost allocation to be useful it has to be aligned with the project rate setting and repayment responsibilities. Reclamation stated at the meeting that the allocation of costs and the setting of water and power rates are not related. That statement is shocking as Reclamation's objective should be to insure that benefits, allocated costs and rates are in harmony.

Reclamation also presented charts at the meeting to show how the cost allocation changes when the benefits change. This is a perfect demonstration of what happens when future benefits are used in the SCRB allocation process. When future benefits are used, the allocation percentages change exactly as shown in the charts. If historical benefits are used one single allocation factor is developed for the entire 100 period of analysis, unlike what is shown in the charts.

In summary, a historical benefit analysis has never been used in the history of CVP cost allocations, would inappropriately weigh the allocation of costs to project benefits provided before 1965, would diminutively value operational changes that have occurred in the last 25 years, would not be aligned with future operations of the project, would be disconnected from future water and power rate setting, have socioeconomic impacts, and slant the SCRB method so that the alternative cost becomes the justifiable expenditure for every project purpose. That is not the intent SCRB allocation method. Simply put, the use of historical benefits in this cost allocation is a non-starter.

2. System Benefits: Reclamation stated that the CVP power system provides power system benefits to keep the grid operational. System benefits should not be used to allocate costs to CVP water and power customers. If an estimation of value can ever be determined for these benefits, the cost associated with those benefits should be allocated to non-reimbursable as those benefits flow to all customers on the Western interconnected grid, not just to CVP customers.

3. Alternative Cost: Designing an alternative cost for power is difficult because power is the lowest CVP priority, generated only when water is released for the other project purposes. Thus, the CVP system is a high capacity, low energy generator that is not cost effective as a standalone purpose. NCPA believes that two alternative options be considered and the less costly of the two options be used for the single purpose alternative. First, a hydro alternative should be developed as a large Shasta generator that can provide the future generation capability of the CVP under average water hydrology. Second, a gas fired generator alternative be developed that would provide the same future generation that is projected to occur under average water conditions.

NCPA's agrees that the sizing for the alternative cost should be based upon the average amount of generation forecasted to occur in 2020. This comports with using future benefits to develop the benefit analysis. Alternative costs are not developed based on water and power deliveries that can no longer provided.

The benefit analysis has to be based on the same logic as the alternative cost development, which is one more reason why future benefits are the only appropriate benefits to be used in the cost allocation. The SCRB benefit analysis needs to align with the alternative cost development.

4. Modeling: One of the bullets under the technical presentation of the PLEXOS model stated that it values CVP generation by modeling 2020 conditions, when California's 33 percent renewable resource mandate is implemented. Large hydro is not considered a renewable resource and, except for Nimbus and Lewiston power plant generation, no valuation should be placed in this analysis of large hydro having a renewable benefit. Nimbus and Lewiston produce approximately one percent of the total CVP generation.

It is very difficult to provide comments on the modeling with the general information that has been provided. NCPA strongly recommends that Reclamation coordinate this evaluation with Western so that the benefits are accurately valued.